

**Abstract**

In one aspect, embodiments of the invention are directed to DNA molecules encoding a fusion protein, wherein the fusion protein comprises at least two anti-pathogenic proteins or protein domains joined by at least one linker peptide. In another aspect, embodiments of the invention are directed to methods for improving resistance or tolerance of a plant to a pathogen, wherein the method comprises integrating a DNA molecule encoding a fusion protein comprising at least two anti-pathogenic proteins or protein domains joined by at least one linker peptide.